LOCAL ADVERSE EFFECT OF INTRADERMAL ADMINISTRATION OF INFLUENZA VACCINATION IS AN INDICATOR OF SATISFACTORY IMMUNOGENICITY

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BACKGROUND: There are few studies concerning the association between immunogenicity of intradermal (ID) administration of influenza vaccination and adverse effect of vaccination.

METHODS: It was a subgroup analysis of ID vaccination recipient of a randomised controlled trial comparing ID and intramuscular influenza vaccination. Outcomes were immunogenicity (in terms of seroconversion of H1N1 strain at day 21) and short-term (within 7 days) adverse effects. Adverse effects were divided into local (like swelling and redness) and systemic (like fever and myalgia).

RESULTS: Overall, 50 nursing home older adults had received ID vaccination. At day 7, 30 of them had satisfactory immunogenicity (serconversion with ≥4-fold increase in antibody titre). Of them, 13 had one or more kinds of local adverse effect, with redness being the most common; 8 of them had one or more kinds of systemic adverse effect, with malaise being the most common. All participants with any local adverse effect had satisfactory immunogenicity. There was sigificant association between any local adverse effect and satisfactory immunogenicity (P=0.002). There was no significant association between any systemic adverse effect and satisfactory immunogenicity (P=0.44).

CONCLUSION: Local adverse effect of ID administration of influenza vaccination is an indicator of satisfactory immunogenicity.